

# INTERNATIONAL SEARCH REPORT

International Application No  
PCT/US2004/036707

**A. CLASSIFICATION OF SUBJECT MATTER**  
IPC 7 C07C211/59 C07C211/61 C07D285/14 C08G73/02 H01L51/30

According to International Patent Classification (IPC) or to both national classification and IPC

**B. FIELDS SEARCHED**

Minimum documentation searched (classification system followed by classification symbols)  
IPC 7 C07C C07D C08G H01L

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, WPI Data, BEILSTEIN Data, CHEM ABS Data, PAJ

**C. DOCUMENTS CONSIDERED TO BE RELEVANT**

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
P, X	WO 2004/037887 A (COVION ORGANIC SEMICONDUCTORS) 6 May 2004 (2004-05-06) page 25; claims -----	1-14
P, X	EP 1 437 395 A (LG ELECTRONICS) 14 July 2004 (2004-07-14) claim 10, compounds S4 and S5 -----	1
P, X	US 2004/209118 A1 (JEONG DAE SEO ET AL.) 21 October 2004 (2004-10-21) claim 10, compounds G-5, G-6 -----	1
P, X	EP 1 394 617 A (CANON) 3 March 2004 (2004-03-03) page 7 - page 14; claims ----- -/-	5,12

Further documents are listed in the continuation of box C.

Patent family members are listed in annex.

\* Special categories of cited documents :

- "A" document defining the general state of the art which is not considered to be of particular relevance
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- "O" document referring to an oral disclosure, use, exhibition or other means
- "P" document published prior to the international filing date but later than the priority date claimed

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- "X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
- "Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art
- "&" document member of the same patent family

Date of the actual completion of the international search

14 February 2005

Date of mailing of the international search report

22/02/2005

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## C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	PATENT ABSTRACTS OF JAPAN vol. 2003, no. 12, 5 December 2003 (2003-12-05) -& JP 2003 316044 A (CANON INC), 6 November 2003 (2003-11-06) the whole document -----	5-14
X	PATENT ABSTRACTS OF JAPAN vol. 2002, no. 05, 3 May 2002 (2002-05-03) -& JP 2002 003833 A (TOYO INK MFG CO LTD), 9 January 2002 (2002-01-09) abstract -----	1
X	PATENT ABSTRACTS OF JAPAN vol. 2000, no. 25, 12 April 2001 (2001-04-12) -& JP 2001 226331 A (MITSUI CHEMICALS INC), 21 August 2001 (2001-08-21) the whole document -----	1
X	US 4 983 482 A (ONG ET AL) 8 January 1991 (1991-01-08) column 9, line 4 - column 14, line 22; claims; example I -----	1
X	EP 0 953 624 A (CANON KABUSHIKI KAISHA) 3 November 1999 (1999-11-03) table, compounds 29, 65, 73, 88; examples; claims -----	1
X	PATENT ABSTRACTS OF JAPAN vol. 1996, no. 06, 28 June 1996 (1996-06-28) -& JP 08 053397 A (TOYO INK MFG CO LTD), 27 February 1996 (1996-02-27) the whole document -----	1
X	PATENT ABSTRACTS OF JAPAN vol. 1996, no. 05, 31 May 1996 (1996-05-31) -& JP 08 020771 A (TOYO INK MFG CO LTD), 23 January 1996 (1996-01-23) the whole document -----	1-3
X	EP 1 146 034 A (TOYO INK MANUFACTURING CO., LTD) 17 October 2001 (2001-10-17) Table 1, compound 8; examples; claims -----	1
X	US 2003/157364 A1 (SENOO AKIHIRO ET AL) 21 August 2003 (2003-08-21) page 7, compounds 14 and 16; page 15, compound 52 -----	1
		-/-

**INTERNATIONAL SEARCH REPORT**International Application No  
PCT/US2004/036707**C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT**

Category	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	WO 03/000773 A (CAMBRIDGE DISPLAY TECHNOLOGY LIMITED; TOWNS, CARL; O'DELL, RICHARD) 3 January 2003 (2003-01-03) claims; examples -----	1-14
A	WO 99/54385 A (THE DOW CHEMICAL COMPANY) 28 October 1999 (1999-10-28) claims; examples -----	1,5,12

**INTERNATIONAL SEARCH REPORT**

Information on patent family members

International Application No PCT/US2004/036707	
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Patent document cited in search report		Publication date		Patent family member(s)		Publication date
WO 2004037887	A	06-05-2004	DE WO	10249723 A1 2004037887 A2		06-05-2004 06-05-2004
EP 1437395	A	14-07-2004	EP JP US	1437395 A2 2004204238 A 2004137270 A1		14-07-2004 22-07-2004 15-07-2004
US 2004209118	A1	21-10-2004	WO	2004078872 A2		16-09-2004
EP 1394617	A	03-03-2004	JP EP	2004109999 A 1394617 A2		08-04-2004 03-03-2004
JP 2003316044	A	06-11-2003		NONE		
JP 2002003833	A	09-01-2002		NONE		
JP 2001226331	A	21-08-2001		NONE		
US 4983482	A	08-01-1991		NONE		
EP 0953624	A	03-11-1999	DE DE EP JP US US	69914523 D1 69914523 T2 0953624 A1 2000016973 A 2003207153 A1 2005025997 A1		11-03-2004 03-02-2005 03-11-1999 18-01-2000 06-11-2003 03-02-2005
JP 08053397	A	27-02-1996	JP	2686418 B2		08-12-1997
JP 08020771	A	23-01-1996	JP	3463358 B2		05-11-2003
EP 1146034	A	17-10-2001	EP DE DE EP JP JP JP JP JP JP JP JP JP JP KR US US	1146034 A1 69625018 D1 69625018 T2 0765106 A2 3340687 B2 11265788 A 2924809 B2 10072579 A 2924810 B2 10072580 A 10072581 A 204220 B1 6251531 B1 5759444 A		17-10-2001 09-01-2003 10-04-2003 26-03-1997 05-11-2002 28-09-1999 26-07-1999 17-03-1998 26-07-1999 17-03-1998 17-03-1998 15-06-1999 26-06-2001 02-06-1998
US 2003157364	A1	21-08-2003	DE DE EP JP JP US	69804529 D1 69804529 T2 0879868 A2 3508984 B2 11035532 A 6517957 B1		08-05-2002 02-10-2002 25-11-1998 22-03-2004 09-02-1999 11-02-2003
WO 03000773	A	03-01-2003	EP WO JP US	1397416 A1 03000773 A1 2004532348 T 2004254324 A1		17-03-2004 03-01-2003 21-10-2004 16-12-2004

## INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT/US2004/036707

Patent document cited in search report	Publication date	Patent family member(s)		Publication date
WO 9954385	A 28-10-1999	US	6309763 B1	30-10-2001
		CA	2294485 A1	28-10-1999
		CN	1263542 T	16-08-2000
		DE	69908522 D1	10-07-2003
		DE	69908522 T2	15-04-2004
		EP	0988337 A1	29-03-2000
		JP	2002506481 T	26-02-2002
		WO	9954385 A1	28-10-1999
		US	2001026878 A1	04-10-2001